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IN THE CLAIMS:

1. (Currently amended) A photoresist base material consisting essentially of an extreme ultra-violet reactive organic compound represented by the following general formula (1),

$$\begin{pmatrix}
C
\end{pmatrix}_{m} \begin{pmatrix}
C
\end{pmatrix}_{m} \begin{pmatrix}
C
\end{pmatrix}_{n}$$
(1)

wherein A is an organic group selected from the group consisting of

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wherein each of B, C and D is independently an extreme ultra-violet reactive group, a group having reactivity to the action of chromophore active to extreme ultra-violet or an organic group selected from the group consisting of

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$$A_1 - A_1 - CH_2 - C$$

$$A_1 - 0 - C$$
 H_2
 C
 H_2
 C
 $A_1 - 0$

wherein Ar is a phenyl or naphthyl group substituted with RO- and/or ROCO- in which R, RO- and ROCO are extreme ultra-violet reactive groups or groups having reactivity to the action of a chromophore active to extreme ultra-violet,

wherein each of X, Y and Z is independently a single bond or an ether bond, and 1 + m + n = 2, 3, 4 or 8.

- 2. (Original) The photoresist base material as recited in claim 1, wherein said extreme ultra-violet reactive organic compound is in an amorphous state at room temperature and has a molecule whose average diameter is 2 nm or less.
- 3. (Currently amended) The photoresist base material as recited in claim 1, wherein A is an organic group selected from the group consisting of

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wherein each of B, C and D is selected from the group consisting of a hydrogen atom, tert-butyl, tert-butyloxycarbonylmethyl, tert-butyloxycarbonyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl, an organic group represented by

$$\frac{H_2}{C} \xrightarrow{S} P \left\{ O - C - O - Q \right\}_r$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and an organic group selected from the group consisting of

$$A_1 - A_1 - CH_2 - C$$

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wherein Ar is a phenyl or naphthyl group substituted with RO- and/or ROCO- in which R is selected from the group consisting of hydrogen, tert-butyl, tert-butyloxycarbonylmethyl, tert-butyloxycarbonyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl and an organic group represented by

$$\begin{array}{c} & \xrightarrow{H_2} P \left(O - C - O - Q \right)_r \end{array}$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and each of X, Y and Z is independently a single bond or an ether bond.

4. (Currently amended) The photoresist base material as recited in claim 3, wherein

A is an organic group selected from the group consisting of represented by

wherein each of B, C and D is selected from the group consisting of a hydrogen atom,

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tert-butyl, tert-butyloxycarbonylmethyl, tert-butyloxycarbonyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl and an organic group represented by

$$- \left(\begin{array}{c} H_2 \\ C \end{array} \right)_{S} P - \left(\begin{array}{c} O \\ O - C - O - Q \end{array} \right)_{r}$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and X, Y and Z are ether bonds.

5. (Currently amended) A photoresist base material consisting essentially of a radiation-sensitive organic compound represented by the following general formula (1),

$$\begin{pmatrix}
C
\end{pmatrix}_{m} X$$

$$\begin{pmatrix}
C
\end{pmatrix}_{m} Y$$

wherein A is an organic group represented by selected from the group consisting of

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wherein each of B, C and D is independently selected from the group consisting of tertbutyloxycarbonylmethyl, tert-butyloxycarbonyl and an organic group represented by

$$-\left(\begin{matrix} H_2 \\ C \end{matrix}\right)_S P - \left(\begin{matrix} O \\ O - C - O - Q \end{matrix}\right)_T$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

each of X, Y and Z is independently a single bond or an ether bond, and 1 + m + n = 3 [[or 8]].

6. (Original) The photoresist base material as recited in claim 5, wherein the organic group represented by

$$-\left(\begin{array}{c} H_2 \\ C \end{array}\right)_{S} P - \left(\begin{array}{c} O \\ O - C - O - Q \end{array}\right)_{r}$$

is 4-(tert-butoxycarbonyloxy)benzyl or 3,5-di(tert-butoxycarbonyloxy)benzyl.

- 7. (Original) The photoresist base material as recited in claim 5, wherein the radiation is extreme ultra-violet or electron beam.
- 8. (Previously presented) The photoresist base material as recited in claim 1, wherein at least one of B, C and D is a hydrogen atom and X, Y and Z are ether bonds.
- 9. (Previously presented) The photoresist base material as recited in claim 1, which has a basic impurity content of 10 ppm or less.
- (Previously presented) A photoresist composition comprising a solid content 10. containing the photoresist base material recited in claim 1 and a solvent.
- 11. (Original) A photoresist composition comprising a solid content containing the photoresist base material recited in claim 9 and a solvent.
- 12. (Original) The photoresist composition as recited in claim 10, which further comprises an optically-acid-generating agent.
 - 13. (Original) A method for purification of a photoresist base material, which

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comprises washing the photoresist base material recited in claim 1 with an acidic aqueous solution and treating the material with an ion-exchange resin.

- (Previously presented) The method for purification of a photoresist base material 14. as recited in claim 13, wherein said acidic aqueous solution is an acetic acid aqueous solution.
- (Previously presented) A method for improvement of the photoresist base 15. material recited in claim 1 in radiation sensitivity, which comprises decreasing the content of basic impurities to 10 ppm or less.
- (Previously presented) A method for fine processing by lithography, which uses 16. the photoresist composition recited in claim 10.
- (Previously presented) A semiconductor device fabricated using the photoresist 17. composition recited in claim 10.
 - 18. (Canceled)
- (Previously presented) The organic compound as recited in claim 21 or 22, which 19. has a basic impurity content of 10 ppm or less.
 - (Previously presented) A method for purification of an organic compound, which 20.

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comprises washing the organic compound recited in claim 21 or 22 with an acidic aqueous solution and treating the compound with an ion-exchange resin.

21. (Previously presented) An organic compound represented by the following

$$\begin{pmatrix}
C
\end{pmatrix}_{m} \begin{pmatrix}
C
\end{pmatrix}_{m} \begin{pmatrix}
C
\end{pmatrix}_{n} \begin{pmatrix}
C$$

general formula (1),

wherein A is an organic group represented by

wherein each of B, C and D is independently tert-butyloxycarbonylmethyl, tert-butyloxycarbonyl and an organic group represented by

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$$- \left(\begin{array}{c} H_2 \\ C \end{array} \right)_S P - \left(\begin{array}{c} O \\ O - C - O - Q \end{array} \right)_T$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

each of X, Y and Z is independently a single bond or an ether bond, and 1 + m + n = 3;

provided that excluded is the organic compound represented as follows

22. (Previously presented) An organic compound represented by the following general formula (1),

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$$\begin{pmatrix}
C
\end{pmatrix}_{m}
\begin{pmatrix}
C
\end{pmatrix}_{m}
\begin{pmatrix}
C
\end{pmatrix}_{m}
\begin{pmatrix}
C
\end{pmatrix}_{n}$$
(1)

wherein A is an organic group represented by

wherein each of B, C and D is independently an organic group represented by

$$\begin{array}{c} & \xrightarrow{H_2} P \left(O - \overset{O}{C} - O - Q \right)_r$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

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each of X, Y and Z is independently a single bond or an ether bond, and 1 + m + n = 8.

23. (Previously presented) The organic compound as recited in claim 21 or 22, wherein the organic group represented by

$$-\left(\begin{array}{c} H_2 \\ C \end{array}\right)_S P \left(\begin{array}{c} O \\ O - C - O - Q \end{array}\right)_r$$

is 4-(tert-butoxycarbonyloxy)benzyl or 3,5-di(tert-butoxycarbonyloxy)benzyl.

24. (Currently Amended) A photoresist base material comprising an extreme ultraviolet reactive organic compound represented by the following general formula (1),

$$\begin{pmatrix}
C
\end{pmatrix}_{m}^{B}
\begin{pmatrix}
X
\\
Z
\end{pmatrix}_{n}$$
(1)

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wherein A is an organic group selected from the group consisting of

wherein each of B, C and D is independently an extreme ultra-violet reactive group selected from the group consisting of

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wherein Ar is a phenyl or naphthyl group substituted with RO- and/or ROCO- in which R, RO- and ROCO are extreme ultra-violet reactive groups or groups having reactivity to the action of a chromophore active to extreme ultra-violet,

wherein each of X, Y and Z is independently a single bond or an ether bond, and 1 + m + n = 2, 3 or 4;

provided that excluded is the organic compound represented as follows

25. (Currently Amended) A photoresist base material comprising an extreme ultraviolet reactive organic compound represented by the following general formula (1),

$$\begin{pmatrix}
C
\end{pmatrix}_{m}
\begin{pmatrix}
X
\\
Z
\end{pmatrix}_{n}$$
(1)

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wherein A is an organic group represented by

wherein each of B, C and D is selected from the group consisting of tert-butyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl, an organic group represented by

$$\frac{H_2}{C} \xrightarrow{P} P \left(O - C - O - Q \right)_r$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and an organic group selected from the group consisting of

$$A_1 - A_1 - CH_2 - A_1 - A_1$$

wherein Ar is a phenyl or naphthyl group substituted with RO- and/or ROCO- in which R is selected from the group consisting of hydrogen, tert-butyl, tert-butyloxycarbonylmethyl, tert-

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butyloxycarbonyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl and an organic group represented by

$$\frac{-\left(\begin{array}{c}H_2\\C\end{array}\right)_{S}P-\left(\begin{array}{c}O\\C\end{array}\right)_{C}O-Q\\ \end{array}$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and wherein each of X, Y and Z is independently a single bond or an ether bond, and 1 + m + n = 8.

26. (New) A photoresist base material consisting essentially of an extreme ultraviolet reactive organic compound represented by the following general formula (1),

$$\begin{pmatrix}
C
\end{pmatrix}_{m} X$$

$$\begin{pmatrix}
C
\end{pmatrix}_{m} X$$

$$\begin{pmatrix}
C
\end{pmatrix}_{m} X$$

$$\begin{pmatrix}
C
\end{pmatrix}_{n}$$
(1)

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wherein A is an organic group represented by

wherein each of B, C and D is selected from the group consisting of tert-butyl, tert-butyloxycarbonylmethyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl, an organic group represented by

$$\begin{array}{c} \begin{array}{c} \begin{array}{c} H_2 \\ C \end{array} \end{array} P \begin{array}{c} O \\ O \\ C \end{array} O - Q \end{array}$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and an organic group selected from the group consisting of

$$A_1 - A_1 - CH_2 - A_1 - A_1 - CH_2 - C$$

wherein Ar is a phenyl or naphthyl group substituted with RO- and/or ROCO- in which R is selected from the group consisting of hydrogen, tert-butyl, tert-butyloxycarbonylmethyl, tert-butyloxycarbonyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl and

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an organic group represented by

$$\begin{array}{c} - \left(\begin{array}{c} H_2 \\ C \end{array} \right)_S P \left(\begin{array}{c} O \\ O - C - O - Q \end{array} \right)_r$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and wherein each of X, Y and Z is independently a single bond or an ether bond, and 1 + m + n = 8.

27. (New) A photoresist base material comprising an extreme ultra-violet reactive organic compound represented by the following general formula (1),

$$\begin{pmatrix}
C
\end{pmatrix}_{m}
\begin{pmatrix}
C
\end{pmatrix}_{m}
\begin{pmatrix}
C
\end{pmatrix}_{n}$$
(1)

wherein A is an organic group represented by

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wherein each of B, C and D is selected from the group consisting of a hydrogen atom, tert-butyl, tert-butyloxycarbonylmethyl, tert-butyloxycarbonyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl, an organic group represented by

$$-\left(\begin{array}{c} H_2 \\ C \end{array}\right)_S P - \left(\begin{array}{c} O \\ II \\ O - C - O - Q \end{array}\right)_T$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and an organic group selected from the group consisting of

$$A_1 - A_1 - CH_2 - CH_2$$

wherein Ar is a phenyl or naphthyl group substituted with RO- and/or ROCO- in which R is selected from the group consisting of hydrogen, tert-butyloxycarbonylmethyl, tert-butyloxycarbonyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-phenoxyethyl and an organic group represented by

$$-\left(\begin{array}{c} H_2 \\ C \end{array}\right)_S P - \left(\begin{array}{c} O \\ II \\ O - C - O - Q \end{array}\right)_T$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon

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atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and wherein each of X, Y and Z is independently a single bond or an ether bond, and $1+m+n=2. \label{eq:condition}$

28. (New) A photoresist base material consisting essentially of an extreme ultraviolet reactive organic compound represented by the following general formula (1),

wherein A is an organic group represented by

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wherein each of B, C and D is independently selected from the group consisting of tertbutyloxycarbonylmethyl and an organic group represented by

$$\frac{H_2}{C} \rightarrow P + \left(O - C - O - Q \right)_r$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

each of X, Y and Z is independently a single bond or an ether bond, and 1 + m + n = 8.

29. (New) A photoresist composition comprising a solid content containing a photoresist base material and a solvent,

the photoresist base material consisting essentially of an extreme ultra-violet reactive organic compound represented by the following general formula (1),

$$\begin{pmatrix}
C
\end{pmatrix}_{m}
\begin{pmatrix}
C
\end{pmatrix}_{m}
\begin{pmatrix}
C
\end{pmatrix}_{n}$$
(1)

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wherein A is an organic group represented by

wherein each of B, C and D is selected from the group consisting of a hydrogen atom, tert-butyl, tert-butyloxycarbonylmethyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl, an organic group represented by

$$\frac{H_2}{C} \rightarrow P + \left(0 - C - O - Q\right)$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

wherein Ar is a phenyl or naphthyl group substituted with RO- and/or ROCO- in which R is selected from the group consisting of hydrogen, tert-butyl, tert-butyloxycarbonylmethyl, tert-

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butyloxycarbonyl, 1-tetrahydropyranyl, 1-tetrahydrofuranyl, 1-ethoxyethyl, 1-phenoxyethyl, and organic group represented by

$$-\left(\begin{array}{c} H_2 \\ C \\ \end{array}\right)_S P \left(\begin{array}{c} O \\ O \\ \end{array}\right)_T$$

wherein P is an aromatic group having a valence of (r + 1) and having 6 to 20 carbon atoms, Q is an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10 and s is an integer of 0 to 10,

and wherein each of X, Y and Z is independently a single bond or an ether bond, and 1 + m + n = 8;

provided that the composition does not comprise a polymer.

- 30. (New) A photoresist composition comprising a solid content containing the photoresist base material recited in claim 5 and a solvent.
- 31. (New) A photoresist composition comprising a solid content containing the photoresist base material recited in claim 24 and a solvent.
- 32. (New) A photoresist composition comprising a solid content containing the photoresist base material recited in claim 25 and a solvent.

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- 33. (New) A photoresist composition comprising a solid content containing the photoresist base material recited in claim 26 and a solvent.
- 34. (New) A photoresist composition comprising a solid content containing the photoresist base material recited in claim 27 and a solvent.
- 35. (New) A photoresist composition comprising a solid content containing the photoresist base material recited in claim 28 and a solvent.